

In the Claims:

Please consider the claims as follows:

1. (currently amended) A haptic information presentation system, comprising:

a haptic presentation unit having two eccentric rotators; and

a control unit that independently changes one or more of a frequency of a vibration, and an intensity of a vibration ~~and/or~~ and a vibration sensation by controlling one or more of rotation directions, a phase relation ~~and/or~~ rotation speeds of the two eccentric rotators.

2. (currently amended) A haptic information presentation system, comprising:

a haptic presentation unit having two eccentric rotators; and

a control unit that independently changes one or more of a frequency of a force, and an intensity of a force ~~and/or~~ or a force sensation by inverting rotation directions ~~in the~~ in the two eccentric rotators.

3. (currently amended) A haptic information presentation system, comprising:

a haptic presentation unit having an eccentric rotator array in which ~~plural~~ one or more of multiple single eccentric rotators, ~~and/or plural~~ or twin eccentric rotators each having two eccentric rotators, ~~and/or plural~~ twin eccentric rotators arranged in a three-dimensional space are arranged two-dimensionally or three-dimensionally; and

a control unit to control a rotation state of each of the eccentric rotators included in the haptic presentation unit.

4. (currently amended) The haptic information presentation system according to claim 3, wherein

the eccentric rotator array is ~~worked~~ adapted to form a skin-shaped eccentric rotator array, and

the control unit causes the presentation of one or more of a vibration changing spatially and temporally, ~~and/or~~ a vibration sensation, a torque, ~~and/or~~ a torque sensation, ~~or~~ a force ~~and/or~~ a force sensation ~~is presented according to a control mode of the control unit.~~

5. (currently amended) The haptic information presentation system according to claim 4, wherein ~~by setting the control mode of the skin-shaped eccentric rotator array, one~~ causes the presentation of one or more of a vibration, a force, a shear force, a torque, ~~a resultant~~ a resultant torque to twist a palm or a finger or another whole presentation object, a shape feeling of a three-dimensional object caused by presentation of a three-dimensional resisting force, an elastic feeling, a tactile sensation, a feeling in which a force is transmitted on a palm or a finger or another presentation object; a feeling in which a material rolls on a palm or a finger or another presentation object, a ~~feeling in~~ feeling in which a force, a vibration or a torque passes through a palm or a finger or another presentation object, and a texture of a surface of a virtual object ~~is presented.~~

6. (currently amended) A haptic information presentation system, comprising:

a haptic presentation unit having plural rotators arranged three-dimensionally; and

a control unit to control a temporal change of ~~a resultant~~ a resultant angular momentum vector of the haptic presentation unit,

wherein the control unit ~~generates~~ causes the generation of a torque with a fixed value by abruptly changing the resultant angular momentum vector in a vicinity of zero, and controls a precession torque to be a specified value or less.

7. (currently amended) The haptic information presentation system according to any one of claim[[s] 4 ~~to~~ 6, wherein the haptic presentation unit has a shape mountable on a portable communication equipment or a mobile electronic equipment.

8. (original) A haptic information presentation method, wherein when a haptic presentation unit having two eccentric rotators is controlled,

a frequency and an intensity of a vibration and/or a vibration sensation are independently changed by controlling rotation directions, a phase relation and rotation speeds in the two eccentric rotators.

9. (original) A haptic information presentation method, wherein when a haptic presentation unit having two eccentric rotators is controlled,

a frequency and an intensity of a force and/or a force sensation are independently changed by inverting rotation directions in the two eccentric rotators.

10. (original) A haptic information presentation method, wherein when a control is made on a haptic presentation unit having an eccentric rotator array in which plural single eccentric rotators, and/or plural twin eccentric rotators each having two eccentric rotators arranged on a same rotation axis, and/or plural twin eccentric rotators arranged in a three-dimensional space are arranged two-dimensionally or three-dimensionally,

a rotation state of each of the eccentric rotators included in the haptic presentation unit is individually controlled.

11. (original) The haptic information presentation method according to claim 10, wherein

the eccentric rotator array is worked to form a skin-shaped eccentric rotator array, and

a vibration changing spatially and temporally and/or a vibration sensation, a torque and/or a torque sensation, or a force and/or a force sensation is presented.

12. (currently amended) The haptic information presentation method according to claim 11, wherein by setting a control mode of the skin-shaped eccentric rotator array, one of a vibration, a force, a shear force, a torque, a resultant torque to twist a palm or a finger or another whole presentation object, a shape feeling of a three-

dimensional object caused by presentation of a three-dimensional resisting force, an elastic feeling, a tactile sensation, a feeling in which a force is transmitted on a palm or a finger or another presentation object, a feeling in which a material rolls on a palm or a finger or another presentation object, a feeling in which a force, a vibration or a torque passes through a palm or a ~~finger or finger~~ or another presentation object, and a texture of a surface of a virtual object is presented.

13. (original) A haptic information presentation method, wherein when a haptic presentation unit having plural rotators arranged three-dimensionally is controlled, a temporal change of a resultant angular momentum vector of the haptic presentation unit is controlled, and

a torque with a fixed value is generated by abruptly changing the resultant angular momentum vector in a vicinity of zero, and a precession torque is controlled to have a specified value or less.

14. (currently amended) The haptic information presentation system according to ~~any one of claim 1 to 7~~claim 2, wherein

the haptic presentation unit includes a rotation unit to rotate the eccentric rotator, the control unit controls a rotation state of the rotation unit included in the haptic presentation unit, and the rotation unit rotates together with the eccentric rotator to be rotated.

15. (currently amended) The haptic information presentation system according to ~~any one of claims 1 to 7 and claim 14~~claim 14, wherein the haptic presentation unit includes a fin rotated together with the eccentric rotator, and a fluid surrounding the fin.

16. (currently amended) The haptic information presentation system according to claim 15, wherein

the fluid is air, and
the haptic presentation__unit includes a hole opposite to the fin and communicating with outside.

17. (currently amended) The haptic information presentation system according to ~~any one of claims 1 to 7, 14 and 15~~claim 14, further comprising an input unit to input external information to the control unit,

wherein the control unit controls a rotation state of each of the eccentric rotators included in the haptic presentation unit in accordance with the external information inputted from the input unit.

18. (original) The haptic information presentation system according to claim 17, wherein

the haptic presentation unit includes the input unit and the control unit, and
the haptic presentation unit itself is the haptic information presentation system.

19. (currently amended) The haptic information presentation system according to ~~any one of claims 1 to 7, and 14 to 18~~claim 14, wherein

piezoelectric elements are used instead of the eccentric rotators, and
the control unit controls a voltage of each of the piezoelectric elements included in the haptic presentation unit.

20. (currently amended) The haptic information presentation system according to ~~any one of claims 1 to 7, and 14 to 18~~claim 14, wherein magnets are used instead of the eccentric rotators, and the control unit controls a voltage of each of the magnets included in the haptic presentation unit.

21. (currently amended) The haptic information presentation system according to ~~any one of claims 1 to 7, and 14 to 18~~claim 14, wherein material particles of the two eccentric rotators rotate around a same rotation axis on a same plane.

22. (currently amended) A haptic presentation device of a haptic information presentation system, comprising a function of a haptic presentation unit of a haptic information presentation system according to ~~any one of claims 1 to 7, and 14 to~~

~~21~~claim 14.

23. (currently amended) A control device of a haptic information presentation system, comprising a function of a control unit of a haptic information presentation system according to ~~any one of claims 1 to 7, and 14 to 21~~claim 14.

24. (new) The haptic information presentation system according to claim 1, wherein

the haptic presentation unit includes a rotation unit to rotate the eccentric rotator, the control unit controls a rotation state of the rotation unit included in the haptic presentation unit, and the rotation unit rotates together with the eccentric rotator to be rotated.